

Sequence Listing

<110> Kainoh, Mie

Tanaka, Toshiaki

<120> Chimeric proteins, their heterodimer complexes, and platelet substitutes

<130> 1102-98

<141> 1998-09-29

<150> PCT/JP98/00370

<151> 1997-01-29

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JAN 12 2000 TECH CENTER 1600/2500

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Lys Ser Cys Gly Glu Cys Ile Gln Ala Gly Pro Asn Cys Gly Trp Cys
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Asp Asp Leu Glu Ala Leu Lys Lys Gly Cys Pro Pro Asp Asp Ile
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Glu Asn Pro Arg Gly Ser Lys Asp Ile Lys Lys Asn Lys Asn Val Thr
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65 70 75

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Ser	Glu	Gln	Asn	Cys	Thr	Thr	Pro	Phe	Ser	Tyr	Lys	Asn	Val	Leu	Ser	
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Leu	Thr	Asn	Lys	Gly	Glu	Val	Phe	Asn	Glu	Leu	Val	Gly	Lys	Gln	Arg	
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Leu	Leu	Val	Phe	Ser	Thr	Asp	Ala	Gly	Phe	His	Phe	Ala	Gly	Asp	Gly	
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Asn	Asn	Met	Tyr	Thr	Met	Ser	His	Tyr	Tyr	Asp	Tyr	Pro	Ser	Ile	Ala	
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Asp	Ala	Tyr	Cys	Arg	Lys	Glu	Asn	Ser	Ser	Glu	Ile	Cys	Ser	Asn	Asn	
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495 500 505

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640 645 650

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Glu Pro Lys Ser Cys Asp

715

aaa act cac aca tgc cca ccg tgc cca ggtaagccag cccaggcctc 2615 Lys Thr His Thr Cys Pro Pro Cys Pro

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GIY	GIŸ	Pro	ser	vai	Pne	ьeu	Pne	Pro	Pro	гÀг	Pro	гÀг	_	Thr	ьeu	
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Ile	Glu	Lys	Thr	Ile	Ser	Lys	Ala	Lys								
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Leu	Val	Lys	Gly	Phe	Tyr	Pro	Ser	Asp	Ile	Ala	Val	Glu	Trp	Glu	Ser	×
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Ser	Asp	Gly	Ser	Phe	Phe	Leu	Tyr	Ser	Lys	Leu	Thr	Val	Asp	Lys	Ser	,
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Leu	His	Asn	His	Tyr	Thr	Gln	Lys	Ser	Leu	Ser	Leu	Ser	Pro	Gly	Lys	
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                                                          -15
                -25
                                                                      96
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Leu Ala Leu Ser Gln Gly Ile Leu Asn Cys Cys Leu Ala Tyr Asn Val
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Gly Leu Pro Glu Ala Lys Ile Phe Ser Gly Pro Ser Ser Glu Gln Phe
      5
                          10
                                              15
ggg tat gca gtg cag cag ttt ata aat cca aaa ggc aac tgg tta ctg
                                                                     192
Gly Tyr Ala Val Gln Gln Phe Ile Asn Pro Lys Gly Asn Trp Leu Leu
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30

35

20

gtt	ggt	tca	ccc	tgg	agt	ggc	ttt	cct	gag	aac	cga	atg	gga	gat	gtġ	240
Val	Gly	Ser	Pro	Trp	Ser	Gly	Phe	Pro	Glu	Asn	Arg	Met	Gly	Asp	Val	le .
				40					4 5					50		
tat	aaa	tgt	cct	gtt	gac	cta	tcc	act	gcc	aca	tgt	gaa	aaa	cta	aat	288
Tyr	Lys	Cys	Pro	Val	Asp	Leu	Ser	Thr	Ala	Thr	Cys	Glu	Lys	Leu	Asn	
			55					60					65			
ttg	caa	act	tca	aca	agc	att	cca	aat	gtt	act	gag	atg	aaa	acc	aac	336
Leu	Gln	Thr	Ser	Thr	Ser	Ile	Pro	Asn	Val	Thr	Glu	Met	Lys	Thr	Asn	
		70					75					80				
atg	agc	ctc	ggc	ttg	atc	ctc	acc	agg	aac	atg	gga	act	gga	ggt	ttt	384
Met	Ser	Leu	Gly	Leu	Ile	Leu	Thr	Arg	Asn	Met	Gly	Thr	Gly	Gly	Phe	
	85					90					95					
ctc	aca	tgt	ggt	cct	ctg	tgg	gca	cag	caa	tgt	999	aat	cag	tat	tac	432
Leu	Thr	Cys	Gly	Pro	Leu	Trp	Ala	Gln	Gln	Cys	Gly	Asn	Gln	Tyr	Tyr	
100					105					110					115	
aca	acg	ggt	gtg	tgt	tct	gac	atc	agt	cct	gat	ttt	cag	ctc	tca	gcc	480
Thr	Thr	Gly	Val	Cys	Ser	Asp	Ile	Ser	Pro	Asp	Phe	Gln	Leu	Ser	Ala	
				120					125					130		
agc	ttc	tca	cct	gca	act	cag	ccc	tgc	cct	tcc	ctc	ata	gat	gtt	gtg	528
Ser	Phe	Ser	Pro	Ala	Thr	Gln	Pro	Cys	Pro	Ser	Leu	Ile	Asp	Val	Val	
			135					140					145			
gtt	gtg	tgt	gat	gaa	tca	aat	agt	att	tat	cct	tgg	gat	gca	gta	aag	576
Val	Val	Cys	Asp	Glu	Ser	Asn	Ser	Ile	Tyr	Pro	Trp	Asp	Ala	Val	Lys	
		150					155					160				
aat	ttt	ttg	gaa	aaa	ttt	gta	caa	ggc	ctt	gat	ata	ggc	ccc	aca	aag	624
Asn	Phe	Leu	Glu	Lys	Phe	Val	Gln	Gly	Leu	Asp	Ile	Gly	Pro	Thr	Lys	
	165					170					175					

aca	cag	gtg	999	tta	att	cag	tat	gcc	aat	aat	cca	aga	gtt	gtg	ttt	672
Thr	Gln	Val	Gly	Leu	Ile	Gln	Tyr	Ala	Asn	Asn	Pro	Arg	Val	Val	Phe	
180					185					190					195	
aac	ttg	aac	aca	tat	aaa	acc	aaa	gaa	gaa	atg	att	gta	gca	aca	tcc	720
Asn	Leu	Asn	Thr	Tyr	Lys	Thr	Lys	Glu	Glu	Met	Ile	Val	Ala	Thr	Ser	
				200					205					210		
cag	aca	tcc	caa	tat	ggt	999	gac	ctc	aca	aac	aca	ttc	gga	gca	att	768
Gln	Thr	Ser	Gln	Tyr	Gly	Gly	Asp	Leu	Thr	Asn	Thr	Phe	Gly	Ala	Ile	
			215					220					225			
caa	tat	gca	aga	aaa	tat	gcc	tat	tca	gca	gct	tct	ggt	999	cga	cga	816
Gln	Tyr	Ala	Arg	Lys	Tyr	Ala	Tyr	Ser	Ala	Ala	Ser	Gly	Gly	Arg	Arg	
		230				*	235					240				
agt	gct	acg	aaa	gta	atg	gta	gtt	gta	act	gac	ggt	gaa	tca	cat	gat	864
Ser	Ala	Thr	Lys	Val	Met	Val	Val	Val	Thr	Asp	Gly	Glu	Ser	His	Asp	
	245					250					255					
ggt	tca	atg	ttg	aaa	gct	gtg	att	gat	caa	tgc	aac	cat	gac	aat	ata	912
Gly	Ser	Met	Leu	Lys	Ala	Val	Ile	Asp	Gln	Cys	Asn	His	Asp	Asn	Ile	
260					265					270					275	
ctg	agg	ttt	ggc	ata	gca	gtt	ctt	999	tac	tta	aac	aga	aac	gcc	ctt	960
Leu	Arg	Phe	Gly	Ile	Ala	Val	Leu	Gly	Tyr	Leu	Asn	Arg	Asn	Ala	Leu	
				280					285					290		
gat	act	aaa	aat	tta	ata	aaa	gaa	ata	aaa	gcg	atc	gct	agt	att	cca	1008
Asp	Thr	Lys	Asn	Leu	Ile	Lys	Glu	Ile	Lys	Ala	Ile	Ala	Ser	Ile	Pro	
			295					300					305			
aca	gaa	aga	tac	ttt	ttc	aat	gtg	tct	gat	gaa	gca	gct	cta	cta	gaa	1056
Thr	Glu	Arg	Tyr	Phe	Phe	Asn	Val	Ser	Asp	Glu	Ala	Ala	Leu	Leu	Glu	
		310					315					320				

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aag	gct	999	aca	tta	gga	gaa	çaa	att	ttc	agc	att	gaa	ggt	ačt	ġtt ⁱ ,	1104
Lys	Ala	Gly	Thr	Leu	Gly	Glu	Gln	Ile	Phe	Ser	Ile	Glu	Gly	Thr	Val	
	325					330					335				· · · · · · · · · · · · · · · · · · ·	
caa	gga	gga	gac	aac	ttt	cag	atg	gaa	atg	tca	caa	gtg	gga	ttc	agt	1152
Gln	Gly	Gly	Asp	Asn	Phe	Gln	Met	Glu	Met	Ser	Gln	Val	Gly	Phe	Ser	
340					345					350					355	
gca	gat	tac	tct	tct	caa	aat	gat	att	ctg	atg	ctg	ggt	gca	gtg	gga	1200
Ala	Asp	Tyr	Ser	Ser	Gln	Asn	Asp	Ile	Leu	Met	Leu	Gly	Ala	Val	Gly	
				360					365					370		
gct	ttt	ggc	tgg	agt	ggg	acc	att	gtc	cag	aag	aca	tct	cat	ggc	cat	1248
Ala	Phe	Gly	Trp	Ser	Gly	Thr	Ile	Val	Gln	Lys	Thr	Ser	His	Gly	His	
			375					380					385			
ttg	atc	ttt	cct	aaa	caa	gcc	ttt	gac	caa	att	ctg	cag	gac	aga	aat	1296
Leu	Ile	Phe	Pro	Lys	Gln	Ala	Phe	Asp	Gln	Ile	Leu	Gln	Asp	Arg	Asn	
		390					395					400				
cac	agt	tca	tat	tta	ggt	tac	tct	gtg	gct	gca	att	tct	act	gga	gaa	1344
His	Ser	Ser	Tyr	Leu	Gly	Tyr	Ser	Val	Ala	Ala	Ile	Ser	Thr	Gly	Glu	
	405					410					415					
agc	act	cac	ttt	gtt	gct	ggt	gct	cct	cgg	gca	aat	tat	acc	ggc	cag	1392
Ser	Thr	His	Phe	Val	Ala	Gly	Ala	Pro	Arg	Ala	Asn	Tyr	Thr	Gly	Gln	
420					425					430					435	
ata	gtg	cta	tat	agt	gtg	aat	gag	aat	ggc	aat	atc	acg	gtt	att	cag	1440
Ile	Val	Leu	Tyr	Ser	Val	Asn	Glu	Asn	Gly	Asn	Ile	Thr	Val	Ile	Gln	
				440					445					450		
gct	cac	cga	ggt	gac	cag	att	ggc	tcc	tat	ttt	ggt	agt	gtg	ctg	tgt	1488
Ala	His	Arg	Gly	Asp	Gln	Ile	Gly	Ser	Tyr	Phe	Gly	Ser	Val	Leu	Cys	
			455					460					465			

tca	gtt	gat	gtg	gat	aaa	gac	acc	att	aca	gac	gtg	ctc	ttg	gta	ggt	1536
Ser	Val	Asp	Val	Asp	Lys	Asp	Thr	Ile	Thr	Asp	Val	Leu	Leu	Val	Gly	
		470					475					480				
gca	cca	atg	tac	atg	agt	gac	cta	aag	aaa	gag	gaa	gga	aga	gtc	tac	1584
Ala	Pro	Met	Tyr	Met	Ser	Asp	Leu	Lys	Lys	Glu	Glu	Gly	Arg	Val	Tyr	
	485					490					495					
ctg	ttt	act	atc	aaa	aag	ggc	att	ttg	ggt	cag	cac	caa	ttt	ctt	gaa	1632
Leu	Phe	Thr	Ile	Lys	Lys	Gly	Ile	Leu	Gly	Gln	His	Gln	Phe	Leu	Glu	
500					505					510					515	
ggc	CCC	gag	ggc	att	gaa	aac	act	cga	ttt	ggt	tca	gca	att	gca	gct	1680
Gly	Pro	Glu	Gly	Ile	Glu	Asn	Thr	Arg	Phe	Gly	Ser	Ala	Ile	Ala	Ala	
				520					525					530		•
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Leu	Ser	Asp	Ile	Asn	Met	Asp	Gly	Phe	Asn	Asp	Val	Ile	Val	Gly	Ser	
			535					540					545			
cca	cta	gaa	aat	cag	aat	tct	gga	gct	gta	tac	att	tac	aat	ggt	cat	1776
Pro	Leu	Glu	Asn	Gln	Asn	Ser	Gly	Ala	Val	Tyr	Ile	Tyr	Asn	Gly	His	
		550					555					560				
cag	ggc	act	atc	cgc	aca	aag	tat	tcc	cag	aaa	atc	ttg	gga	tcc	gat	1824
Gln	Gly	Thr	Ile	Arg	Thr	Lys	Tyr	Ser	Gln	Lys	Ile	Leu	Gly	Ser	Asp	
	565					570					575					
gga	gcc	ttt	agg	agc	cat	ctc	cag	tac	ttt	999	agg	tcc	ttg	gat	ggc	1872
Gly	Ala	Phe	Arg	Ser	His	Leu	Gln	Tyr	Phe	Gly	Arg	Ser	Leu	Asp	Gly	
580					585					590					595	
tat	gga	gat	tta	aat	999	gat	tcc	atc	acc	gat	gtg	tct	att	ggt	gcc	1920
Tyr	Gly	Asp	Leu	Asn	Gly	Asp	Ser	Ile	Thr	Asp	Val	Ser	Ile	Gly	Ala	
				600					605					610		

ttt	gga	caa	gtg	gtt	caa	ctc	tgg	tca	caa	agt	att	gct	gat	gta	gct	1968	
Phe	Gly	Gln	Val	Val	Gln	Leu	Trp	Ser	Gln	Ser	Ile	Ala	Asp	Val	Ala		
			615					620					625				
ata	gaa	gct	tca	ttc	aca	cca	gaa	aaa	atc	act	ttg	gtc	aac	aag	aat	2016	
Ile	Glu	Ala	Ser	Phe	Thr	Pro	Glu	Lys	Ile	Thr	Leu	Val	Asn	Lys	Asn		
		630					635					640					
gct	cag	ata	att	ctc	aaa	ctc	tgc	ttc	agt	gca	aag	ttc	aga	cct	act	2064	
Ala	Gln	Ile	Ile	Leu	Lys	Leu	Cys	Phe	Ser	Ala	Lys	Phe	Arg	Pro	Thr		
	645					650					655						
aag	caa	aac	aat	caa	gtg	gcc	att	gta	tat	aac	atc	aca	ctt	gat	gca	2112	
Lys	Gln	Asn	Asn	Gln	Val	Ala	Ile	Val	Tyr	Asn	Ile	Thr	Leu	Asp	Ala		
660					665					670					675		
gat	gga	ttt	tca	tcc	aga	gta	acc	tcc	agg	999	tta	ttt	aaa	gaa	aac	2160	
Asp	Gly	Phe	Ser	Ser	Arg	Val	Thr	Ser	Arg	Gly	Leu	Phe	Lys	Glu	Asn		
				680					685					690			
aat	gaa	aġg	tgc	ctg	cag	aag	aat	atg	gta	gta	aat	caa	gca	cag	agt	2208	
Asn	Glu	Arg	Cys	Leu	Gln	Lys	Asn	Met	Val	Val	Asn	Gln	Ala	Gln	Ser		
			695					700					705				
tgc	ccc	gag	cac	atc	att	tat	ata	cag	gag	ccc	tct	gat	gtt	gtc	aac	2256	
Cys	Pro	Glu	His	Ile	Ile	Tyr	Ile	Gln	Glu	Pro	Ser	Asp	Val	Val	Asn		
		710					715					720					
tct	ttg	gat	ttg	cgt	gtg	gac	atc	agt	ctg	gaa	aac	cct	ggc	act	agc	2304	
Ser	Leu	Asp	Leu	Arg	Val	Asp	Ile	Ser	Leu	Glu	Asn	Pro	Gly	Thr	Ser		
	725					730					735						
cct	gcc	ctt	gaa	gcc	tat	tct	gag	act	gcc	aag	gtc	ttc	agt	att	cct	2352	
Pro	Ala	Leu	Glu	Ala	Tyr	Ser	Glu	Thr	Ala	Lys	Val	Phe	Ser	Ile	Pro		
740					745					750					755		

ttc	cac	aaa	gac	tgt	ggt	gag	gat	gga	ctt	tgc	att	tct	gat	cta	gtc	2400
Phe	His	Lys	Asp	Cys	Gly	Glu	Asp	Gly	Leu	Cys	Ile	Ser	Asp	Leu	Val	
				760					765					770		
cta	gat	gtc	cga	caa	ata	cca	gct	gct	caa	gaa	caa	ccc	ttt	att	gtc	2448
Leu	Asp	Val	Arg	Gln	Ile	Pro	Ala	Ala	Gln	Glu	Gln	Pro	Phe	Ile	Val	
			775					780					785			
agc	aac	caa	aac	aaa	agg	tta	aca	ttt	tca	gta	aca	ctg	aaa	aat	aaa	2496
Ser	Asn	Gln	Asn	Lys	Arg	Leu	Thr	Phe	Ser	Val	Thr	Leu	Lys	Asn	Lys	
		790					795					800				
agg	gaa	agt	gca	tac	aac	act	gga	att	gtt	gtt	gat	ttt	tca	gaa	aac	2544
Arg	Glu	Ser	Ala	Tyr	Asn	Thr	Gly	Ile	Val	Val	Asp	Phe	Ser	Glu	Asn	
	805					810					815					
ttg	ttt	ttt	'gca	tca	ttc	tcc	cta	ccg	gtt	gat	999	aca	gaa	gta	aca	2592
Leu	Phe	Phe	Ala	Ser	Phe	Ser	Leu	Pro	Val	Asp	Gly	Thr	Glu	Val	Thr	
820					825					830					835	•
tgc	cag	gtg	gct	gca	tct	cag	aag	tct	gtt	gcc	tgc	gat	gta	ggc	tac	2640
Cys	Gln	Val	Ala	Ala	Ser	Gln	Lys	Ser	Val	Ala	Cys	Asp	Val	Gly	Tyr	
				840					845					850		
cct	gct	tta	aag	aga	gaa	caa	cag	gtg	act	ttt	act	att	aac	ttt	gac	2688
Pro	Ala	Leu	Lys	Arg	Glu	Gln	Gln	Val	Thr	Phe	Thr	Ile	Asn	Phe	Asp	
			855					860					865			
ttc	aat	ctt	caa	aac	ctt	cag	aat	cag	gcg	tct	ctc	agt	ttc	caa	gcc	2736
Phe	Asn	Leu	Gln	Asn	Leu	Gln	Asn	Gln	Ala	Ser	Leu	Ser	Phe	Gln	Ala	
		870					875					880				
tta	agt	gaa	agc	caa	gaa	gaa	aac	aag	gct	gat	aat	ttg	gtc	aac	ctc	2784
Leu	Ser	Glu	Ser	Gln	Glu	Glu	Asn	Lys	Ala	Asp	Asn	Leu	Val	Asn	Leu	
	885					890					895					

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aaa	att	cct	ctc	ctg	tat	gat	gct	gaa	att	cac	tta	aca	aga	tct	acc.	2832
Lys	Îlē	Pro	Leu	Leu	Tyr	Asp	Ala	Glu	Ile	His	Leu	Thr	Arg	Šer	Thr	
900					905				00	910	-			*	915	
aac	atà	aat	ttt	tat	gaa	atc	tct	tcg	gat	999	aat	gtt	cct	tca	atc	2880
Asn	Ile	Asn	Phe	Tyr	Glu	Ile	Ser	Ser	Asp	Gly	Asn	Val	Pro	Ser	Īĺe	
				920					925					930	+ - ·	
gtg	cac	agt	ttt	gaa	gat	gtt	ggt	cca	aaa	ttc	atc	ttc	tcc	ctg	aag	2928
Val	His	Ser	Phe	Glu	Asp	Val	Gly	Pro	Lys	Phe	Ile	Phe	Ser	Leu	Lys	
			935					940					945			
gta	aca	aca	gga	agt	gtt	cca	gta	agc	atg	'gca	act	gta	atc	atc	cac	2976
Val	Thr	Thr	Gly	Ser	Val	Pro	Val	Ser	Met	Ala	Thr	Val	Ile	Ile	His	
		950					955					960				
atc	cct	cag	tat	acc	aaa	gaa	aag	aac	cca	ctg	atg	tac	cta	act	9 99	3024
Ile	Pro	Gln	Tyr	Thr	Lys	Glu	Lys	Asn	Pro	Leu	Met	Tyr	Leu	Thr	Gly	
	965				•	970					975					
gtg	caa	aca	gac	aag	gct	ggt	gac	atc	agt	tgt	aat	gca	gat	atc	aat	3072
Val	Gln	Thr	Asp	Lys	Ala	Gly	Asp	Ile	Ser	Cys	Asn	Ala	Asp	Ile	Asn	
980					985					990					995	
cca	ctg	aaa	ata	gga	caa	aca	tct	tct	tct	gta	tct	ttc	aaa	agt	gaa	3120
Pro	Leu	Lys	Ile	Gly	Gln	Thr	Ser	Ser	Ser	Val	Ser	Phe	Lys	Ser	Glu	
			1	1000				1	L005				1	L010		
aat	ttc	agg	cac	acc	aaa	gaa	ttg	aac	tgc	aga	act	gct	tcc	tgt	agt	3168
Asn	Phe	Arg	His	Thr	Lys	Glu	Leu	Asn	Cys	Arg	Thr	Ala	Ser	Cys	Ser	
]	1015]	L020				1	025			
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Asn	Val	Thr	Cys	Trp	Leu	Lys	Asp	Val	His	Met	Lys	Gly	Glu	Tyr	Phe	
	1	030				1	.035				1	040				

gtt	aat	gtg	act	acc	aga	att	tgg	aac	999	act	ttc	gca	tca	tca	acg	3264
Val	Asn	Val	Thr	Thr	Arg	Ile	Trp	Asn	Gly	Thr	Phe	Ala	Ser	Ser	Thr	
:	L045				=	1050				:	L055					
ttc	cag	aca	gta	cag	cta	acg	gca	gct	gca	gaa	atc	aac	acc	tat	aac	3312
Phe	Gln	Thr	Val	Gln	Leu	Thr	Ala	Ala	Ala	Glu	Ile	Asn	Thr	Tyr	Asn	
1060)			=	L065				1	L070				-	1075	
cct	gag	ata	tat	gtg	att	gaa	gat	aac	act	gtt	acg	att	ccc	ctg	atg	3360
Pro	Glu	Ile	Tyr	Val	Ile	Glu	Asp	Asn	Thr	Val	Thr	Ile	Pro	Leu	Met	
			1	1080				-	1085					1090		
ata	atg	aaa	cct	gat	gag	aaa	gcc	gaa	gta	cca	aca	gat	ccc	gag		3405
Ile	Met	Lys	Pro	Asp	Glu	Lys	Ala	Glu	Val	Pro	Thr	Asp	Pro	Glu		
		-	1095				1	1100				1	105			
ctgo	ctgga	aag d	caggo	ctcag	gc go	ctcct	gcct	gga	acgca	atcc	cggd	ctate	gca (gccc	cagtcc	3465
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gcto	caggg	gag a	agggt	ctto	ct gg	gcttt	ttc	c cag	ggcto	ctgg	gcag	ggcad	cag g	gctag	ggtgcc	3585
ccta	aacco	cag g	gccct	gcad	ca ca	aaagg	gggca	a ggt	gct	gggc	tcaç	gacct	gc (caaga	agccat	3645
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cago	ctcgg	gac a	acctt	ctct	c ct	ccca	agatt	c cca	agtaa	actc	ccaa	atctt	ct (ctct	gca	3762
gag	ccc	aaa	tct	tgt	gac	aaa	act	cac	aca	tgc	cca	ccg	tgc	cca		3807
Glu	Pro	Lys	Ser	Cys	Asp	Lys	Thr	His	Thr	Cys	Pro	Pro	Cys	Pro		
		:	1110				1	1115				1	120			
ggta	aagco	cag d	cccaç	ggcct	c go	cct	ccago	e tea	aaggo	ggg	acag	gtgo	ccc f	tagag	gtagcc	3867
tgca	atcca	agg g	gacaç	gcco	cc as	gccgg	ggtgo	c tga	acaco	gtcc	acct	ccat	ct (cttc	ctca	3925
gca	cct	gaa	ctc	ctg	9 99	gga	ccg	tca	gtc	ttc	ctc	ttc	ccc	cca	aaa	3973
Ala	Pro	Glu	Leu	Leu	Gly	Gly	Pro	Ser	Val	Phe	Leu	Phe	Pro	Pro	Lys	
		:	1125				1	L130]	135			
ccc	aag	gac	acc	ctc	atg	atc	tcc	cgg	acc	cct	gag	gtc	aca	tgc	gtg	4021

Pro	Lys	Asp	Thr	Leu	Met	Ile	Ser	Arg	Thr	Pro	Glu	Val	Thr	Cys	Val		
1140					1145				1150								
gtg	gtg	gac	gtg	agc	cac	gaa	gac	cct	gag	gtc	aag	ttc	aac	tgg	tac	4069	
Val	Val	Asp	Val	Ser	His	Glu	Asp	Pro	Glu	Val	Lys	Phe	Asn	Trp	Tyr		
1155							.160 1					1165					
gtg	gac	ggc	gtg	gag	gtg	cat	aat	gcc	aag	aca	aag	ccg	cgg	gag	gag	4117	
Val	Asp	Gly	Val	Glu	Val	His	Asn	Ala	Lys	Thr	Lys	Pro	Arg	Glu	Glu		
1170				1	1175				1180						1185		
cag	tac	aac	agc	acg	tac	cgg	gtg	gtc	agc	gtc	ctc	acc	gtc	ctg	cac	4165	
Gln	Tyr	Asn	Ser	Thr	Tyr	Arg	Val	Val	Ser	Val	Leu	Thr	Val	Leu	His		
1190 119													-	L200			
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Ala	Leu	Pro	Ala	Pro	Ile	Glu	Lys	Thr	Ile	Ser	Lys	Ala	Lys				
	-	L220				1	L225				-	L230					
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										Gly	Gln	Pro	Arg	Glu	Pro		
												=	L235				
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1240 1245 1250																	
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Val	Ser	Len	Thr	Cvs	Leu	Val	Lvs	Glv	Phe	Tvr	Pro	Ser	Asp	Ile	Ala		

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